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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,520	05/05/2006	William Wesley Martin	UDL36.002APC	8477
20995 7590 08/13/2008 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER LE, DAVID D	
			ART UNIT 3681	PAPER NUMBER
			NOTIFICATION DATE 08/13/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/563,520	Applicant(s) MARTIN, WILLIAM WESLEY	
	Examiner David D. Le	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/05/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the first Office action on the merits of Application No. 10/563,520, filed on 05 May 2006. Claims 1-33 are pending.

Documents

2. The following documents have been received and filed as part of the patent application:
 - Copies of Foreign Priority Documents, received on 01/05/06
 - Information Disclosure Statement, received on 05/05/06
 - Declaration and Power of Attorney, received on 05/05/06

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it contains legal phraseology, "means". Correction is required. See MPEP § 1826.

5. The disclosure is objected to because of the following informalities:

- The arrangement of the disclosure fails to comply with PCT Administrative Instruction Section 204. See MPEP § 1823.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 1-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 1:

- Lines 4-5 recite the limitation "the clutch torque limit value". There is insufficient antecedent basis for this limitation in the claim.

- Lines 6-7 recite the limitation "the predetermined value". There is insufficient antecedent basis for this limitation in the claim.

Claim 3:

- Line 2 recites the limitation "the new gear ratio". There is insufficient antecedent basis for this limitation in the claim.

Claim 6:

- Line 2 recites the limitation "the new gear ratio". There is insufficient antecedent basis for this limitation in the claim.

Claim 8:

- Line 3 recites the limitation "the new gear ratio". There is insufficient antecedent basis for this limitation in the claim.

Claim 13:

- Line 2 recites the limitation "the new gear ratio". There is insufficient antecedent basis for this limitation in the claim.

Claim 15:

- Line 2 recites the limitation "the condition". There is insufficient antecedent basis for this limitation in the claim.

Claim 16:

- Line 6 recites the limitation “a known relationship between the gear ratios”. It is unclear what known relationship between the gear ratios that the claim is referring to.

Claim 18:

- Line 2 recites the limitation "the rate of change of torque". There is insufficient antecedent basis for this limitation in the claim.

Claim 20:

- Line 3 recites the limitation "a drive source". It is unclear whether this drive source is different from the one, which is first recited on line 3 of claim 1.

Claim 24:

- Line 3 recites the limitation "means for estimating the torque in the transmission". It is unclear whether this limitation is different from the one, which is first recited on lines 1-2 of claim 24.

Claim 26:

- Line 1 recites the limitation "the condition". There is insufficient antecedent basis for this limitation in the claim.

Claim 27:

- Line 4 recites the limitation "a drive source". It is unclear whether this drive source is different from the one, which is first recited on line 1 of claim 27.
- Line 8 recites the limitation "a second gear ratio". It is unclear whether this second gear ratio is different from the one, which is first recited on lines 6-7 of claim 27.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. **Claims 1-15 and 26-33, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent No. 6,061,619 to Schmitz et al. (hereinafter referred to as Schmitz).**

Claims 1-15 and 26-33:

Schmitz (Figs. 1-3; column 2, line 23 – column 7, line 24) discloses a motor vehicle comprising:

- A transmission (i.e., Fig. 3, element 33) having a plurality of gear ratios (i.e., column 5, lines 10-12);
- A selector means (i.e., Fig. 3, element 36);
- A clutch means (i.e., Fig. 3, element 32);

- A drive source (i.e., Fig. 3, element 31);
- A control system for controlling a clutch torque limit value (i.e., column 6, lines 16-52);
- Wherein the control system is constructed and arranged to automatically adjust the clutch torque limit value before the selector means selects an unengaged gear ratio, to allow relative rotational movement between input and output sides of the clutch (i.e., column 4, line 25 - column 7, line 14);
- A sensor (i.e., Fig. 3, element 37 or 38) arranged to detect the operational status of the clutch means;
- An actuator (i.e., Fig. 3, element 35) for controlling the clutch torque limit value;
- Wherein the actuator (35) reduces the clutch torque limit value until the sensor means detects slip between the input and output sides of the clutch before selecting an unengaged gear ratio (i.e., column 4, line 25 - column 7, line 14);
- Means for controlling the speed and torque of the drive source (i.e., column 6, lines 16-52);
- Means for sensing the position of the selector means (i.e., Fig. 3, element 41);
and
- Wherein the clutch means (32) is a clutch (i.e., Fig. 3).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 16-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitz et al. in view of U. S. Patent No. 5,767,420 to De Schepper et al. (hereinafter referred to as De Schepper).

Claims 16-24:

Schmitz discloses the limitations as set forth in paragraph 9 above. Regarding claims 16-24, Schmitz lacks means for measuring deformation.

De Schepper (i.e., Figs. 1-16; column 1, line 36 – column 7, line 36) discloses a torque detecting device comprising:

- A transmission (i.e., Fig. 10);
- A plurality of gear ratios (i.e., Fig. 11);
- Selector means (i.e., Figs. 10 and 11, being the clutches and brakes) for selectively engaging the gear ratios;
- A control system (i.e., Fig. 1) including means for measuring deformation (i.e., Fig. 1, element 3) caused by torque in the transmission that is deformed due to torque (i.e., column 2, line 45 - column 4, line 18);
- Means for controlling the torque (i.e., Fig. 1, element 50) in the transmission;

- Wherein the control system is arranged to measure deformation and to adjust the torque in the transmission according to the measured deformation and the gear ratios (i.e., column 2, line 45 – column 7, line 36);
- Wherein the means for controlling torque in the transmission includes a clutch means (i.e., Fig. 1);
- Wherein the means for controlling torque in the transmission includes means for controlling a speed of a drive source (i.e., column 2, line 45 – column 7, line 36);
- Wherein the control system includes means for calculating the magnitude of torque in the transmission system (i.e., column 2, line 45 – column 7, line 36);
- Wherein the control system includes estimating means for estimating torque in the transmission when the selector means engages an unengaged gear ratio (i.e., column 2, line 45 – column 7, line 36);
- Sensor means (i.e., Fig. 1, element 4) for sensing a position of the selector means; and
- Wherein the control system includes at least one means for measuring engine speed (i.e., column 6, lines 49-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schmitz to include means for measuring deformation in view of De Schepper, in order to provide a torque detecting device which has a simple structure and a low cost but can effectively detect a low torque (De Schepper, column 1, lines 34-36).

Double Patenting

12. Claim 25 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 14. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

13. Claims 16-24 of this application appear to conflict with claims 1-21 of Application No. 10/563,514. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Eggert et al. (U. S. Patent No. 6,899,655) teaches a method of and an apparatus for preventing shifts of reference positions of friction clutches.

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- Kayano et al. (U. S. Patent No. 6,514,172) teaches a control apparatus of automatic transmission, as shown in Figs. 1-6.
- Kato et al. (U. S. Patent No. 5,679,099) teaches an apparatus for controlling slip amount of motor vehicle clutch during vehicle starting.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0900-1730).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David D. Le/
Primary Examiner, Art Unit 3681
08/06/2008

ddl